



FIG. 1

10 30 50
 GTGAAGAACGAAAAAACCTTCTTGAAGAGCTTACGAGGCTTAGAGGAAACCCACGAC
 M K N E K T F F E E L Y E A L E E T H D
 70 90 110
 AACACCGATGCCACTAGGGGTCAGATAGGGGTCAGAGGACTTCTTGGCCACCGAC
 N T D A T R G S D R G S E D F F L A T D
 130 150 170
 CCCCTCCAGATGGAGGTGCCGAAAATCGCTCGCGAAGGGCTTACATACCAAAAAGAG
 P P P D G G A E N R L A K G F T Y Q K E
 190 210 230
 GCACCTAGGATTGCTTACCGAGAAAGACCATGAGGCTTCCCTCTGTTGGGGCC
 A L R I A L P E K D H E A F L S S V G A
 250 270 290
 CCCCTATACCAACAGCTGAACCCCCCGTTGGATGTATGTCAGCCGTCCAGGACGGG
 P P I P P A E P P V G N V C Q A V Q D G
 310 330 350
 CCTCAGAAGCTTCTGGAACCTCTCCAGGAGATTGCCGCTCCACCATCCCCTACGGCAAC
 P Q K L L E L L Q E I A R S T I P Y G N
 370 390 410
 CGGGAGCTCTGGAGGAAGGTGGGACGGTCGTCTCATGGTCCCCCTGGAGATGTTGGCC
 R E L W R K V G T V V F M V P L E M L A
 430 450 470
 CTCACCTGGGGTCACCCGGCAGACCGTCACGCCCTGGAAGAAGGTCTTGAGAAAAAG
 L N L G V T R Q T V H A W K K V L E K K
 490 510 530
 GGCCTGGTGGCCACCGACGTCTCACCAAACCGTCAACGGGGAGGCCGGCCATCGGC
 G L V A T D V L H Q T V N G E R R A I G
 550 570 590
 ACCCTTGGCCGTCGGCTGAGGCCAGGGAAAGCCAGGCTCACCTGGACGACTACATC
 T L W A V R L R P G K A R L T L D D Y I
 610 630 650
 TACCCCTGGAGGAACCTGCCCTAGACATGGCCAACGGCGTGCTCTCTTCAACTGGGT
 Y P W R N L A L D M A N G V L S F N W V
 670 690 710
 AAGGCCTACCAAGGACACGGAATCCGCCACCCCTGGACGTGCTGGTCTCTGGGCTCAG
 K A Y Q D H G I R P T L D V L V L W A Q
 730 750 770
 GGGAAAAGGGTGATGCCAACACCAAGACCGTGGCCGTTGACCTGGGCTCATCTGGTC
 G K R V M P N T K T V A V D L G L I L V
 790 810 830
 CTCCCCGAGGTGGAGCGTTCCAAACTCCGCCCTTATCACCTCATTGCTACGTACATT
 L P E V E R S K L P A L I T L I A T Y I
 850 870 890
 GCCGATCTCTAGATGACCGTCGTTCAAGACGTTCTATGCAGGCTGCTGTGGCTGTG
 A D L L D D R R S R R F Y A G L L W A V
 910 930 950
 GCCAGGGGTGAACCTCCCGCGCAATATCTATTGCCGCTCTAATGCCGGTTATCCGAGAT
 A R G E L P A Q Y L F A V L M R V I R D
 970 990 1010
 TACACGGATGGCCATCTGACACGACGGGAGCGTACCTAGTGAAGACCCCTCAAGGGAGG
 Y T D G H L T R P G A Y L V K T L K E A

TCCTGA
S *



2/13

FIG. 2

1 CTATAACGGC^{*}TTT^{*}AGGAGGGGGATTGCCAGCCGCTGGCTGACGGTTATTTGGACC
61 CATAAAAAGGCGAAACCGAGGCGGTTGCCCCGGATCACCCCCAAGACCTAGGGTAACGCC
121 TCGGGCTCCAGATGACAAGGAGGTCCGAGGGTGAAGAACGAAAAAAACCTTCTTGAAGAG
M K N E K T F F... (RepT)

3/13

FIG. 3A

1 tctagaaggt cagggtgtgac aaggaaaaca ccatagcccc tgccaaagaag atggacgagt
 61 tgggtccgg aaaagtggcc atccggggcg ctcttgacaa ctatttcca gcgggtggcca
 121 cccgcatttg ccacgaggta cgagcttgcg gagtagacgg ccacaaggg gtcgtccctca
 181 aactctttt ctagtgcgcg tggacgaa gggaggaaga gaaaggctt catggccica
 241 cctccctccc ctccctcttg gcggccctag cggcgtaaaa ctctgagacg gcctgaagtt
 301 tagggatttgcgtttccgataaataatcc ggcggctcag gggatgcccgg atggccctta
 361 tcctggcgtc ccttatgtac tcgttaatgg tggccttggg tactttaaac cgttctgaaa
 421 ctctcttaac agagagcaca aaacctctaa aaacctatca atccaccga ttccagttata
 481 ccataaaatgg cacaagttt tgagaaggta gtc当地aaa aaggctttctt cggtcagggt
 541 atggtaggtt gggggcggc aaaggccgac ttaagttgg taaagccggg aggaagcaaa
 601 cccgggtttt accatgcaac agatggccgat gtc当地aaa tggacacaga gaagcggt
 661 gcttcgttggag aagggttatt tggataaaact actgcaggatc tataaaggggg aaagtggc
 721 ttcgaggatca gtaccagagg aggttaggaa aaaacttcgc gaggcttaca aggcatc
 781 ggggaggcag gatagtccgg aggcagaaac gaaactcgtg gaagccgtc taaatgccc
 841 aaaaaaggc gaggcgcccc ccttcaatca cccctacctg ccttggctt actacctgg
 901 ttcggaaaaaa gcagaaaaaa cgaacaaggc ctttggggat gtc当地aaa aggttgc
 961 aaagcaccatca gaaaccatcc gcttccgttca gaggaaagcg caaaaagag gcgttaga
 1021 cttgtatccaa aggttcaagg agccctccgaa aataatcgat cagatgggc cgtatgtt
 1081 aagggtgtac aaagaagagc taaaggggaa aatagaagag aggttccag gcccattt
 1141 accaaagatt gtggtagtat cccctggaaa aagtaaaccg gagaagcacttcc
 1201 ggagagagaa gcccgtatca tcatatatacc gggatcgat gaaatgttga aagatgccc
 1261 caaggaaaac ctggcccttg gcgaggaaagc agaacttaggc accaaggcg tagattt
 1321 cgtggtcatac cggcgtagcc ctgaagagac atggcaccta acaggagaag tgaagtt
 1381 atccgactttt ggcggaaaacc aagacaaccg gaaacttagt gcaaggctt ccataagg
 1441 ggacccgtttag aagaggcaca taggaatagt ggtgggtggac ggaatgcgtg tggtag
 1501 gtttctggg tggccggac tggggaaaaga aacgatcgat acatccgtac tcctcc
 1561 agacccgtata gcccggctt accaaaaggg tgaagaagcc ctggccctt agaaggcg
 1621 cacaatctca aacitgtct gtagcttggggaaaatccctt aacaccctt tagtgaagg
 1681 ttgaccggcc tccctaggagg catctatggc gatggatcgat cgtttaaga ggggtgagg
 1741 tataagcgta gtaccggac ctgc当地aaa atcgagact aaatccccct ctttact
 1801 tgtttggacg atgagcttgc gcatgtccat atttttctcg gtgggtatc gcccgg
 1861 aggttccctt gactgccaat cgttccggat ctttccccc ttcttcaggc gatcccgg
 1921 gtaaactttc ttccggca ccccttccctt tgaccagaca ataagccctt gaggctct
 1981 ctgc当地aaa tttccgggg gatagcgccat gtc当地aaa ggagggggaa gtatttct
 2041 ccaaggccctt ccggtagggc catcccttggat ttcttcaggc gatgcaggg gattgg
 2101 gtaccgttcc ccgttctcgat cttacaaaagg gaaaaggctt gtc当地aaa
 2161 ggggttagcc gattcgttcc aaacgtatgc cccgttttgc gatggacgaa gatcatgt
 2221 cttttgcgtat cccggggccctt tacggggaaaat ttttttggat ttttgcgtat
 2281 atggtaaacg aatgttgc ggc当地aaa ctc当地aaa atgagcttca ctc当地aaa
 2341 gtatttctcgat ttttgcgtat ctttgcgtat ctttgcgtat cccgtt
 2401 tatcaagcgcc tccctcaggat actccacaaa ctgaggacca tcgagggtgt
 2461 caactgaccg tttttggggat ggc当地aaa agcaacgcgat ttttgcgtat
 2521 gagaactgc tggccggatc cataaggcggtt gtc当地aaa accaactgg
 2581 atacccacca ggc当地aaa gcatccaccg gagaacctgaa cccgttttccc
 2641 ggtggccataa ggttcaatctt cccggggccctt ggc当地aaa ccttgggg
 2701 ttttgcgtat cccggggccctt ggc当地aaa atcaagaatc ttttgcgtat
 2761 ggggttagacc aacccatccat ggc当地aaa cgggttttgc gaggcttca
 2821 tcgggtccaa ccagggttagc tacgggtccat ttttgcgtat cccagg
 2881 acctccatccat cccggggccctt ggc当地aaa aaccaggaa tccggccaa
 2941 ttttgcgtat cccggggccctt ggc当地aaa gacccatccat
 3001 aggatgtctg caagctccat gggggcgtt gacccatccat
 3061 taccacccatccat gggggcgtt gacccatccat
 3121 gggccacttccat cccggggccctt ggc当地aaa cccggccat
 3181 agatggccat cccggggccctt ggc当地aaa cggccaaatag
 3241 gggggccat cccggggccctt ggc当地aaa agaaacgtct
 3301 tcatcttagga gatccgtat cccggggccctt ggc当地aaa



FIG. 3B

3361 cgctccaccc tggggaggac caggatgagg cccaggtaa cggccacggg cttgggttg
3421 ggcacccatccc ttcccctg agcccaggg accagcacgt ccagggtggg gcggattccg
3481 tggctctggt aggccttgac ccagttgaag gagagcacgc ctggccat gtctaggcg
3541 aggttctcc aggggttagat gtagtcgtcc agggtgagcc tggcttccc tggcctcagc
3601 cggacggccc aaagggtgcc gatggcccg cgctcccg ttagcggtt gtaaggacg
3661 tcggtgccca ccaggccctt ttctcaagg accttctcc aggcgtggac ggtctggcg
3721 gtgacccca ggttgaggc caacatctcc agggggacca tgaagacgac cgtccccacc
3781 ttccctccaga gctcccggtt gccgtagggg atgggtggac gggcaatctc ctggaggagt
3841 tccagaagct tctgaggccc gtccctggacg gcttgcata cattcccaac ggggggttca
3901 gctgggtta tagggggggc cccaaacagag gaaaggaaag cctcatggtc ttctcggt
3961 aaagcaatcc taagtgcctc ttttggat gtaaagccct tcgcgaggcg attttcggca
4021 cctccatctg gagggggtc ggtggccaag aagaagtccct ctgaccctt atctgacccc
4081 ctagtggcat cgggtttgtc gtgggttcc tctaaagcct cgtaaagctc ttcaaagaag
4141 gtttttcgt tcttcacccct cggacccctc tgcacatctgg agcccgaggc gttaccctag
4201 gtcttggggg ttagccgggg caaccgcctc ggttcgcct tttttagggg caaaaataac
4261 cgtcagccca gcccgtggca atccccctc ctaaaaggcc gttataggcc ctgcttaggag
4321 gggggtagta ctttcctacc ccccttaggt tggagaggcc ttaggaggtc tccttagggcc
4381 tcgtgggggt ttaggggtaa ctcatggcc aggcggccg gtcgggact ctggaggagg
4441 ctcacatgc ctactcggtt tggagggtt tgaagggtt cactaatgca tacggctagc
4501 ctcgggatca cggccaaatg gtatgcaggt tttgtataa aaccctcagg tttgaggcta
4561 gttttagtgcg tttttagtca ctttgcactc ggatcacggg cataaacacc agtttccctgc
4621 acgaaaagaaa acttcgcga tctaagaggg gaaaagaggt gtagagggac ggccttcatg
4681 aaagtggcc tcttaggagg ccgtttaga gggccgttc gggttcaaat ccttcctc
4741 tctctccagg ttccgaggt tcgaggctt ggtccaggc ttgtaccaag tttttagcca
4801 aagtctattc tcgaaatata ggggtatctt gtctatctt ctcacgggat atctctgtct
4861 gtgtgaactt gatcccattcc caatacatat ctcaatctcc taatctcctc ttctctccag
4921 atccctaattc tcttcattca ctcatttcctc ctcccaattt agaatggaga gaaaaaacc
4981 cgaccagaac gagcttcgtt gggtcagtt cggtaatctc gggacagggt ttcatcgct
5041 aggacgagga ttagggcatg aaaaatgggc ttgacaaaa tcittctaaa aaatactccc
5101 cgagggtggg gaagtgcctt cggggagaag attttggca gtttagatgt tatgcttat
5161 cacggggccgg aggccctccac gataagttgt ctggccaag taccggggca ggtcgggggt
5221 gctcttcagg tgggtgatgg tactttcactg gaaggtcaca agtcccttta gaggcttcag
5281 gtcggggata gtctcaagt actcccaagc gtttcgggc ccgtggcggg ggagaaggac
5341 aaagggtcg ggcaaaaagtt cattttgc ttaggacgg attactttttag cacctgataa
5401 cttcaggggcc gttaaagaagg gcctcaccc ggagacgggt ggaaggaggaa cgtggcgctg
5461 gaagaagacg aaccccgatt ttggaaagt ctccctccag tttgtatgt aacgttggaa
5521 ggaaggccgc caggatgtt ttcatcgcc ctcgaacccctc ggacacataa aaaacttcg
5581 tgggttcag ggcaagagtg ctatgtatga ggttaacccctc gggagttacaa agtgcctcaa
5641 gccccttc ccaacgcctcc aaaactcttag ggtcagggtgg ttttaggttt ctgaaaaact
5701 ctagcttttcc agtggtcatt ctcacccct ctgcacgtt ctctggaaagg taaacccttgc
5761 acacagcggc caagtctacg gttccctcagg ccagggttc tggacgcgt gagaaggggaa
5821 ggggcttggt gtagaggacc agaagaccc



5/13

FIG. 4

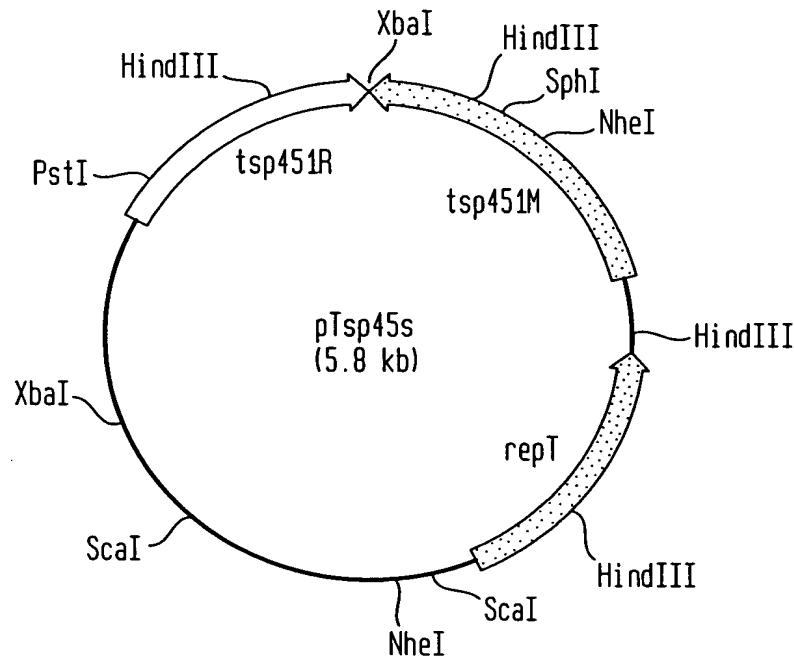


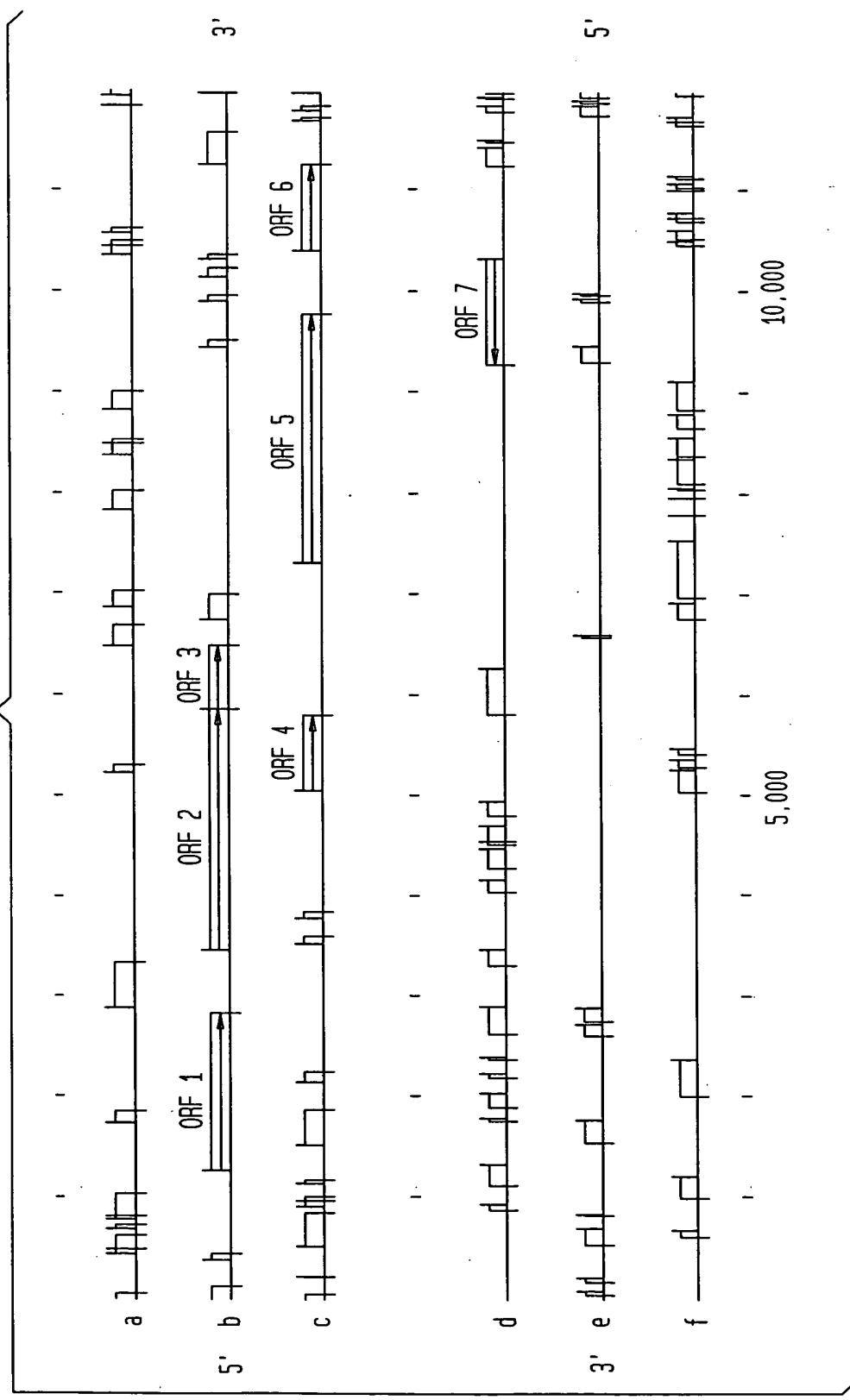
FIG. 5

1 ATGATCGTGGCTGTCACCGGCTTCAAGGGAGGGTGGGAAGACCACCGCGGTCCAC
 M I V A V T G F K G G V G K T T T A V H
 61 CTGGCCTGCTTCTGGCCAGCAGGGGCCCCACCTGCTGGTGGACGGGACCCCAACCGC
 L A C F L A E R G P T L L V D G D P N R
 121 TCCGCCACGGGGTGGCACCGGAGGGGAGGCTCCCGGTGACCGTGGTGGACGAGGGTG
 S A T G W H R R G G L P V T V V D E R V
 181 GCGGCCGGTACGCCGGAGCACGCCACGTGGTCATAGACACCCAGGCCAGCAG
 A A R Y A R E H A H V V I D T Q A R P T
 241 GAAGAGGACCTCCGGCCCTGCCAACGGGTGGACCTGCTGGTCTGCCACGTCCCC
 E E D L R A L A K G V D L L V L P T S P
 301 GACGCCCTGGCCCTGGAGGCCCTCCCTGGCCACCCCTGGAAGCCCTGCCGGGGCGGAGGCC
 D A L A L E A L L A T L E A L R G A E A
 361 CGCTTCCGGTCCCTGACCATGGTGCCCCCGCCCCGAGCCGGACGGGGAGGAGGCC
 R F R V L L T M V P P P P S R D G E E A
 421 CGGGCCCTCTTGGGGCGGAGGGCGTTCCCTCTTCACAGGCTGGTGGACGGCGGGCG
 R A L L G A E G V P L F T G W V R R A A
 481 GCCTTCCCCAAGGCCCTCCCTGGGGTGCCTGTCTACGGCTGGTGGACGGCGGGCG
 A F P K A A L L G V P V Y R V P D P R A
 541 AGGCTGGCCTGGGGGGACTACGCCGGTGGGGAGAGCTCCTGAAGGAGGTGGGGGA
 R L A W G D Y A R V G E E L L K E V G G
 601 TGA 603



FIG. 6

6/13





7/13

FIG. 7A

1	CTTATAACACAAACTATAACGTCCTATCGGGTTTCTTAGGCCATGTAACACACC	60
61	CCTCCCATCTCGGGTGTTCAGCGGATACGGAGGTTAGCGGGAACTTTCCCCTTG	120
121	TTGAAACTTGGGTCTGAGGCTAACAGCAGAACAGCTAGGTTGACTAACACAGCTC	180
181	ATAAGTCCTCATTATCGCCTGAGTCACACCTATGAGTTAACCTTTCAAGAAAAAGA	240
241	GATAAGTGAAGTTGCTCTAGCACGACTTTTCTTGAGTCACCTCTGTGCCGACC	300
301	CCCCGATTTGAGTCACCCCCCTTGAGCCGAACTTGTGGCACAGGGTTGACTC	360
361	AGGGGTTGACTCAACCGAATGGCCTCTGGAAGGGCTGAGCCGACCCCTCCCTCGTGT	420
421	GCCGACCCCCGCTCCACTATGAGCAGGGGGAAAGTTACGGGAAAGTTCCCAAGTCCC	480
481	CCTTGACAAAAGATGACAATGAGTTAATGTCACAGCGATGCGTCACTCACCTCTGGCTG	540
541	GGCTCACCCAGATGCGTGCACGTTAGAGCTCGCAAGGTGCTGGGCGCAGCCGACGT	600
601	GGGCCATGCTCAGGGCTTGACCGCTATGGACTCGTGGAACGGCACGAGGGGCTATG	660
661	TTCTGACCCCTGCGGGCTAGAACTGCCAGGACCTGGAACCCGTGTGGCTGGGG	720
721	ATGAGGGAGTACAGACGGCGTTACAGCTGCTAGGAGTCGGTATGCCGCCGAGGACAGGC	780
781	GCTGAAGCTTTGAGCCGGGCGCTACCCAAGGCCACCCCGCTCTCCCTGGGAT	840
841	CCCAAATGGATCCCTCAGCGCATTATCCTCTGGCGGTCTATAGCGCAAGGAGGTAGT	900
901	GGTGACGAAACACACAAATGTTCACCCACCTTGGATGCCGTAGAGGAGCTCGCTG	960
961	CCAGATTGCTGAAACCGCTAACAGGTTATTCCAGCCATTAGGCAGATTGTCAGAAGT	1020
1021	CCTGCCCTGAGGTTCCGACCTACGCCCTGGATGACTCCGCCAT	1080
1081	CGAGGAGCTGCCAGCGCCTGAGGGAGGTGAGGGAAAGCCCCGCCATTACCGC	1140
1141	CGCCCTCAAAAGGCCCTGGCATGCCCTACAGCGCCGACCCCTGCCAGATGCC	1200
1201	CACGTTGCCAACGCCCTCCGCTGGCGATGGAACGCCAGGGGTGAGCATCCGCAAGCT	1260
1261	TGCGAGAGAGGTAGGGGTAGCAAAACACTGTTAAAAAGTGGCGTGGAGGCCGCTTGT	1320
1321	CCCTCGTTACGGACCTACGTGAGGAGGTGGAGGAGTCCTGGACCTCCCGAAGGCC	1380
1381	CCTTCGGGACGACTACCCGCTGGGGTTGCCAAAAATATTGAAGGTGTTGAGGGAA	1440
1441	AGATGCCCTTATCCGGTTACGCCGACCTTCCTGCCGTGGCCGCCCTGGCGCTA	1500
1501	CGGCCGCCGTGGATGATCTCTCCCGACGAACAGGAGGCCCTGCCGCGAGGACGA	1560
1561	AGACCGGGACCCGCCCTCCAACCGGCCAGAACGCGAGTGCAGAACGCCAGTC	1620
1621	TTTCGGCTTCCCTTGACGAGTGGCCAAGTGGAGGCTGCCAAAGAACGACTACGA	1680
1681	GCGCTATGCCCTACGGCACCTGGAGCATGCCGCGCTGCCGCGAGGACGA	1740
1741	ACCTCTCGCTCCACGACCGTGCAGAACGCTCGAGCGTGAGCGGACTTATAGA	1800
1801	-----	1860



FIG. 7B

1861	ACTGTTCTACGGCTACTGTGTAAACGAACGGGGCCTCGACAGCAACCGCTTGGCCTCGC	1920
1921	CCTCTCACAGACCTGGAGCTCGTCCAATCGTACCTGGAGTGGCGCGTGAATAGGTACAA	1980
1981	GGACGAGGATTACCCCCGTTACTCGATCGGAATACATGTTATGCCCTGGTAAAAAA	2040
2041	ACTCCACAGAGGTTATCTCCGCGCCCTGGGCTGGGTAGACCCGGACGGGTGAAAGA	2100
2101	GCTGGAACGGAAACTGAAAATCGCCGAATTGATGTCACGGACGGTACCCACGCGTGGA	2160
2161	GCCCCCTCTGAAACTCACGAGCCCCCTCCGCTGGGTGCTGGATGGCATCCGGCTCATGCT	2220
2221	CCCGATGCGGGGGGGGGTAGGCAACCTGCTGACACCCCAAATCCCACCGCCAAAG	2280
2281	CGAAGCGGGCGAACGCGTCCGCTACCGGGACGTCGTTCTGCTTGGATGATGGTGGG	2340
2341	CCACCCCCCTCGGGCGAACGATTACTACGAAGCTCGCTGGACATGAGCCAGTTCCAAGA	2400
2401	CGGGGATTCGCTCCGGGCGGGGACACGTGGGGGGGGCGGAGGGTACTACCTGGC	2460
2461	CTACCGCAAAGTGGAGTTAAAAACGCCCAGGGCAGGTCTTCAGAGCCTCCAGGACCA	2520
2521	CGATCTCGTACGTTCCCCCTGGACGACCCCGAGCACCTGTCCTGGCTGGACGTGAA	2580
2581	CGGGATGCGGTACTCCCTAACGAGCTTTCACGTCTACCTGCGCACGATCCTCCCG	2640
2641	CCTGGCCCAGGCTGGGCCGACCGGTCCTGCCCTGCCCCGTGTTCCGGTGCCGATACG	2700
2701	AGGCTCAGACTTGCACATCGTTCAGGCGCCGCGCCCTACGTGGCCGCGTGCCCCGG	2760
2761	GTACCCCAGAAACTTTGCCCTCGGCCCCACTCCATCCGCCACGTGGTGGCCACGGAG	2820
2821	GTCGTGAAGCGCACGGCTCTTGAGGCCGCGCCACGTGCTCTGGATAGCATAGAC	2880
2881	ATGGTCGTTGACATTACGCCGTTGTTCCCCGCGACCGTAAACAGTCACGGTTGGCGGG	2940
2941	CTAACGCCGCCGCCGGGAGGTGAGCGGTGAGGGACCTCCACGACTTTCTGGCCCG	3000
3001	GGTGGACGAACGGTCCGGAACCTACCGGGGGCGCGGGGGTGGCGACGAGTGGCG	3060
3061	GGCGGGCTCGGTCCAGGGCGAGCGGGCGACAGCCTGGCGTGGACCGCGGGAAAGGGTT	3120
3121	CTGGATGACCAACCCCTGGCCCCCGAGCCCGGCAGGGAAACCTCTCACGCTGAT	3180
3181	CCAGGGGCCAAGGGCTCTCCCCCGAGGAGGCCGGCGTGGGCCACAGTGGCTTGG	3240
3241	CCTCTCCCTCGCCAAGGTCAGGCGACGAGGAGCTCAGGACCAAGGTCTTGAGTAC	3300
3301	TCAAGTGCCTGGAGCTGGGTGCTCCAGTCCTGAGTCTCAGGTTCCAGGTACCTGA	3360
3361	GGAGTCGGACCCCTTGAACAACCCCGCTCCGGGACCTCTACCCCAAGGGCGAGGA	3420
3421	CGAGGCCCTTGGCCCCGGCCTCCGAGGAGGTGCTGCGCGCATGGTGTCTAGGCTTCT	3480
3481	CCGCACCCCGAGGCCGTGGCTACCTGAAGGGCGCGGTCTGGATGCCGGTGGTCCG	3540
3541	CCGCTTCTACCTCGGCCCTGGACGACACCGCGCGGGCACCGCCGCCCTGGTACCCGGT	3600
3601	GATAGGGCCGGACGGCTCCCCGTTGCGCCACCTCTACTACGAGATCCCGGCTCAC	3660
3661	CCAGGGCGCCCGGGCAAGGCTGGGGGAGGGGGACGCCACAGCTACTGGCCCTCCC	3720



9/13

FIG. 7C

3721	CCCTTCGAGGGCCCCTCCCCCGCCGCAAGCTTCTTGCGAGGGGGCGAAGGATGC	3780
3781	CTGGCCCTCTGGCTCCACCTCCACGCCAGCCCTGGGCCAGGACCTGGCGGTGGTGAC	3840
3841	CTCCACGCACGGCTCCGCCCTCCCCGAGGCCCTGGAAAGACCCCTGTTCTGGGCCCTTG	3900
3901	GGAGGAGGTCTACCTGGGCCAGGACGCCGACTCCGCCGGAGGAGATGGCCCGGAAGGT	3960
3961	GGCGGAGGTGGCGAGGCCCGTCCGCCGCTCCGGTCCGGAGGGATGGGAAGGA	4020
4021	CTGGACGGACTACTTCTGGCGGGGGCACCCCCGAGGGCTTGCCTCCCTGGAGGG	4080
4081	AGCGGAGGTCTGGAAAGAAGAAGTGGCTGGAGGTGGGCCAGGATCCAGCTCCGGACCC	4140
4141	CGTGGACATCCAGCGGGCTTCGTGCGGGCCACCTCACGTCCCCGTGCGGGTCTGGA	4200
4201	GAACCGGGGAAAGAAGGGGCCGCTACCGCACCGTGGTGGTCCGCTCCGACGGGCCGT	4260
4261	CCTGGCTGGGCTACTTGCAGGCCCGCCGGCACCCCCCTGGAGGACCGGGTGTGGC	4320
4321	CGTGGACGACGGCACCATCATCCGCAGGCCCCGAAGGCCGCCGGACCTCGTGGAA	4380
4381	CGGGGAGGCATCAACCGCTCTGGAAAGCCGGGCCGGGAGTGAGCGCCATGACCGT	4440
4441	GGCCCCCGGGACCTGCCTGGCTCATCGTCGCCACCTCGCAGGTGATCCTCCCCAG	4500
4501	TGAGGACGGCTACCTCCTGGCCCTTAGGGTATGACCTCACGTGAGAGCGTCTT	4560
4561	CGACGCCGTGCCCTCTCCCTGTGGTGGCCGGCTGGGAGACGGAGTTCGC	4620
4621	CCGCCTCATGGCGAGCTGGGGCAACGGCTGGTATACCGGCCAGACCTCCGCCGC	4680
4681	CACCGCCGCCGGATCATGACGAGACGGGGGCTGGTGGCCTCGACGACCTGGAGGA	4740
4741	GGTGCGCCAGCGGTGGGGAGCGCTGAGGCCCTCAGCTGGAGCAGTCTCAAGGTGTC	4800
4801	CTACAAGAAGGAGACCGCGGTCAAGAGTACCAACACCCAGGGACGGGGACATCCTGG	4860
4861	CCTCAACTTCTGGGGTCAAGGTATACCAACACCCAGGGACGGGGACATCCTGGG	4920
4921	GAGCCGGATGTTGTCATCCGCACCGCCGCCCTGGGACCTGGCAGAGGGAGGAGCG	4980
4981	CCGCCCCGAGGGCTCTCCCCCAGGCCCTCAAGAACTCCGGACACCTTACATCT	5040
5041	GGGCATGGAGAACCGCGGCCAGCCTCCACGCCCTGTACCGGGAGCGCTCGCGGGCAAGG	5100
5101	GGGAGCGCCTGGACGAGATGCCGCCCTTGCGTACCATGCCACCACTGGGGACG	5160
5161	AGGAGCTGGCGGCCGCCCTGGAGGACGCCCTGCCGGCAGGAAGGGGCCCTGGAGGAGA	5220
5221	CCCTTCGATGCCAGGTGGAGACCCGCCCTCAAGGAGGCCATGCCAGGGCTTAC	5280
5281	GGAGCCACGTGGCCCTGGTCCACGTGATCTCAGGCCAGGAGATCTCGGGGACGACT	5340
5341	GGGGCCGGGAGCGCACCGTGGACATCCCCGGTGGCGGGACCCAAAGTGGTGGGCAGA	5400
5401	TGCCAGCAACTACGGCTGGCGGCCAGAAAGGCCGTGAGGCCGGCTTGGACCA	5460
5461	AGCAGTCCGCATCATGCGCCTGGAGGCCACCTCGTGGAGCGGGTGGTCAGGGGCTTC	5520
5521	TCCAGGAGGGATCCCTGGAGGCCCTGAAGCAACCCCTGGCTCTGCCCTGGACACCC	5580



MAY 13 2004

10 / 13

FIG. 7D

5581 TCGCGCCGAGTGCCTACCTGCACTGGTGCACCTCCGGCCTGACAAGGAAAAGTGGCT 5640
5641 GGAGCGCTACGGGGAGGCCAAGCTGGCCAGAAAAGGCCGGAGCTGGAGGAGGAGTTTT 5700
5701 GGCCCTGGTGGGCCCAAGATGGCCTTGGCCTCCAGGCTTCCGCCAGGGAGGAGGAGA 5760
5761 CCGAGGTAAGCACCCAACTACCCAAAGTACCCAAAGACCTAAAGCCTCAGGTACCGGAGGA 5820
5821 CCTCGGGACGGAGGACCTAAACCCAAAGGGCGTGAAAGACTGAGGTGAGAGGGATGAT 5880
5881 CGTGGCTGTCACCGCTCAAGGGAGGGTGGGAAGACCACCGCCGGTCCACCTGGC 5940
5941 CTGCTTCTGGCGAGCGGGGCCACCTGCTGGTGACGGGACCCAAACCGCTCCGC 6000
6001 CACGGGGTGGCACCGGAGGGAGGCCTCCCGTGACCGTGGTGACGAGCGGGTGGCGGC 6060
6061 CCGGTACGCCGGGAGCACGCCACGTGGCATAGACACCCAGGCCGCCACGGAAGA 6120
6121 GGACCTCCGGGCCCTGCCAAGGGGTGGACCTGCTGGCTCTGCCACGTCCCCGACGC 6180
6181 CCTGGCCCTGGAGGCCCTCTGGCACCCCTGGAGGCCCTGGCACCCTGGAGGCCCGCTT 6240
6241 CCGGGTCTCTGACCATGGTGCCCCCGCCCCGAGCCGGACGGGAGGAGGCCGGC 6300
6301 CCTCTGGGGCGGAGGGCGTCCCTTCACAGGCTGGTGAGGCCGGCGAGCCTT 6360
6361 CCCAAGGCCGCCCTCTGGGGTGCCCTGTCTACCGGGTGCCGACCCAGGGCGAGGCT 6420
6421 GGCCTGGGGGACTACGCCGGGTGGGGAAAGAGCTCCTGAAGGAGGTGGGGGATGAGC 6480
6481 AAGTCGCCAGGCTCCTAAAGAGGTCAAGGAGAAGGGAGGCCCTGGGGAGCGGCCCT 6540
6541 CGGGGGAAAGAGCCGGCGGGAGGACTACGTGGCATGAAGGTCTACATCAGCAAAGAGCTT 6600
6601 CACCGGAGGCTGAAGCTGAAGGCCCTGGAGGAGGAAGGAGCTTCGGAGCTGGTGGAA 6660
6661 GAGGCCCTGAGGAAGTTGCTGGTGACCTCCTCCGCTCGTAGAGCGTGAAAAGGAGG 6720
6721 TAAGACGATGGTCACCCCTAACAAATGCCCTAGAACCTCTACGCCGGCACTCCCC 6780
6781 CCAGGAGGCCGGCCGTCTTCGAAGGCCCTGGCCGCAAGATATTGAAGGAACCTCCACC 6840
6841 CCATCTGGAGCCAAGAGTTGCTGGATGTCGTCCCTGGTCCGAGCACGCCACCGCAAGG 6900
6901 GGCTCAGGGCCACGGACATGGCGTGGACCTGGTGGGACTCGGGAAAGGAGCACAAGGTCT 6960
6961 ACGCCATCCAGGTCAAGCTGGATAAGCCCTCTCTGGAGGACCTGGGAGCTTC 7020
7021 TGGGGGTGGTGAACCACCCCGAGTACGGCTCGACCAACGGCTCATGTCGGCCCAAGAG 7080
7081 GCGTACCCAGGAGGCCACGCCAGCTCCAGGGCCTACCCATCACCATCTGAGCGAAG 7140
7141 AGGCTCTCCTAGAACGACCTGGACCTGGAAATCCCTCGTTCCAGGCCGAGGAAGGCC 7200
7201 GCAGGGGGGAAGAAGGCCCTCCGTAAGTACCAAGCAAGAACGCTTAGAGGAGGTGGCCA 7260
7261 AAGCCTCTTAGAGAACGGCCTGCCCCGGGCAAGCTCATCATGCCCGGGCACGGGCA 7320
7321 AGACCCCTGGTGGCCCTCAAGATGCCGAAAAGGTGGCGGGCCCGGGGGAGGGTCTCT 7380
7381 TCCCTGGCGCCCTCCATGCCCTCTGGACCAAGTCCCTCAGGGCCTGGCGCGAGGCTT 7440



FIG. 7E

11/13

7441	CCTTGCCTTGCCTCTTCGCCGTGGCTCGACACGGCGTGGCAAGACCTCGGAGG	7500
7501	ACGACCTCTCCGCCCTCCCTCCATCCCTACCAAGCCTGAGGAGCTGG	7560
7561	CCTCGAGGCCAAGACGGAGAGTCAGGAGGCCCTACCGTGGCTCTCCACCTACAGT	7620
7621	CGGCGGAGGTCTGGAGAGGGCCAGAAGGAGCACGGCTCCCTTTGACCTGATGA	7680
7681	TCCTGGACGAAGCCACCGCACGCCACGGTGGGGGGAGAAGAAAGGCCCTCACCA	7740
7741	AGGTGCACCACGACCACTACGTGAAGGCCGCACCGCTCTACATGACGCCACGCCA	7800
7801	GGATCTGGGAGGTGGAGGGGAATGGAGAGAGGGGCAAGGGAAAAAGGCCGGGAAAAAGA	7860
7861	AGGACCTCAGAAAGAGGGTTCTCTCCCTTTGGACCTCGTGCTCTACGGAGG	7920
7921	ACTCCACGGCCCCGAAGGGGTGGAACCTCTGGTCTACTCCATGGACAACGAGGGGATCT	7980
7981	ATGGCCCCACCCCTACGAGTACACCTCACCCGCGCGTGAAGGAGGGCACCTGAGCG	8040
8041	ACTACAAGGTATCGTCTCTCGTGGCGAGGAAGGCCAAAAGGACCTGGCTCTACCC	8100
8101	TCCAGGGACCCGAGGCCCTCAAGGTGGAGGAGCTCTGAAGGCCCTGGCCTGTGGAAGG	8160
8161	TCCTCCAGGGGAGGTGCGGGACGAGGAGGGGAACCGATGGGGGCTCGACCTGCGGA	8220
8221	GAGTCATCGCCTTCCACGGCGGGTGAAGGAGTCAAGGAGATGGAGGAAGAGTTACCGA	8280
8281	AGGTGGCCCTCGCTGCCAGCAGGCTGGCCTCTCCCGAGGAGCTCGGGGGTGGAGG	8340
8341	TGAAGCACATAGACGGGAGATGTCCGCCTATGACCGGAAGCGCCTCTGGACTGGCTTA	8400
8401	GGGAGAACGTCCCCGAGGGGAGGTCCGCCTCCTACCAACGCCAAGGTCTCACCGAGG	8460
8461	GGATCGACGTCCCGCCCTAGATGCCGTGGCCTCATGCGTCCCCGGACAGCGTGGTGG	8520
8521	ACGTGATCCAGGCCGTGGGCGGCCATGCGCAAGGCCCGGGCAAGGAGTACGGGTACG	8580
8581	TGGTCCCTGCCGTGGTGGTGAAGGGGGAGGACGAGGAGCGGGAGATCGAGGAGAGCGGCT	8640
8641	ACCGGGCGGTGTGGCAGGTGCTCTCGGCCTTGCCTCGGTGGACAAGTCCTCGAGGCC	8700
8701	GCATGCCGCCGCCCTGGTGCCTCTCGGGTAAGGGCGAGGGGGAGGTGGAGAG	8760
8761	CCCGAGAGGGTGTGCCGTATGGGAAGGAAGCGCCTCCCCGTATCGTAGATGTCC	8820
8821	TTCAGGGAACCTCACCTCACCGAGAGTACCCGGAGCCTGCCGGCAAGCTGGTCA	8880
8881	GGCGCCTGCCCTGGGCGGAAGTACCTGGAGAACTGGGCCAGGACGTGGCCGGTGG	8940
8941	CGAAGGTGCTGGAGCAGCAGGTCAAGGCCATGGCGAGCGGGACCCAAAGGTGAAGGAAA	9000
9001	AACTGGGAAACTCCTCGCCGCCCTGCAGGCCCTCACCAAGCGAGAGCGTGACGGAGGACG	9060
9061	AAGCCATCCTCATGCTGGTCCAGCACGCTCACCAAGCCATCTCGACGCCCTCTCG	9120
9121	GGGAACCTCTAGAAAAGCGGGAGGACCCGTTCCCGGGCCCTAGACGAACCTTCCAGG	9180
9181	AGTTCAAGGGGTTCTGGACCGGGAGGGAGGCCCTCAAGGATTCTACGAAGAGATGC	9240
9241	GCCTCAAGGCCCTAGGGCTCACGGACGAAGGCCAAAGGGCCGACTTCCACGGAGGCTCT	9300



FIG. 7F

12/13

9301	ACTCCAACCTTCTGCCCGGGCTTCCCCAGGTGGCCGACCAGGTGGGATGCCCTACA	9360
9361	CCCCGGTGGAGCTGGTGGACTTCTGGTGAAGAGCGCAGACGAGCTGGCAGGAAGCACT	9420
9421	GTTGGCCGGGGCTCGATGGGGAGAAGGTCTTCATCCTGGAGCCCTCGCCGGCACAGGC	9480
9481	ACCTTCGTACCCGAATCCTGCACCGGTAGCCGAAAGGGCGGGCCACCGGGTCAAG	9540
9541	GGCAAGCTGGAGCGGGGGAGATCTGGCCAACGAGATCCTCTCCTCCCTACTACGTC	9600
9601	CTCAGGGCCAACGTGGAGAACACCACCCCTGGCCTGACCGGGAGTACGTCCCCCTCAAG	9660
9661	GGGGCGTTCTGGCGGACTCCTCGGCTGGCGAGCTGGGTATAGCGAGAAAAAGTTGG	9720
9721	CATCATCCCGCTTCCCGAAGAACCGTGAAGGCGCCCTGAACGAGCAGCTGAAGGCCCC	9780
9781	TATCCAGGTTATCCTCTCCAACCCCCCGTGCAGGCTGGTTGGAGAAGGAGGGCGAGGGG	9840
9841	AAGAAGAACCCCGTCTACCGTAAGGTGCAGGAGCAGGGTGGAGGCCAACCTATGTACGGCGG	9900
9901	GCCAAGGAACCTCCATCGGGGGACAAACCCAAGGGAGAGAACCTGAACCTCCCTCTAC	9960
9961	GACCAAGTACATCCAGGCCTTGCGGGTGGCGAGCGACCGTATCGGGGAGGAGGGGGTCGTG	10020
10021	GCCTTCGTACCAACAACGGGTGGCTGGGGCGTAGTGCCTCGGGCTTGCAGGGCTCT	10080
10081	TTGGCGGAGGAGTTGCCAGGGTGTACGTCTACGACCTGAGGGGGAGTGCAGGGAGAAG	10140
10141	GGGGAGGCACCGAAGAAGGAGGGGGCGGGCTTTGGACAGCCTCCCGCGCCGGGGTC	10200
10201	TGCCTCCTCCTGGTGAAGCGTAAGGACCACAAAGGGATCGGAAGGTCACCTCTAT	10260
10261	CGGGTCGGGGACGGCCTCTCCGGAGGCCAACGCTGGCTCTGGTGAAGGAGCATGGCTCA	10320
10321	GTCTCTGGTTCCTGGCAAGAGGTTCCCTATGAAGAGTGGTGGGGAGGCTTACCCCG	10380
10381	GGTTCTCGGGATGTTGCCCTGGACAGGGCTTTGAGGTGCGGAGTTCTGGGTGAAGA	10440
10441	CCAACCGCGATGCCCTACGTCTAACCCCTCCGGCGAGCTGGAGCGGCACATGAGGC	10500
10501	GGCTCATCTCCACCTACAACGAGCACGTAAAAGAAAAAGAGGGGAAACTAGGGGAAC	10560
10561	TGGAAAAGGATGAGAGCATCATCAAGTGGGATAGGGAACTCATCAGGTACCTAGAGTC	10620
10621	TGAGGGAAAGCTCTACGAAGGGAGCGGTCAAGTCTACGAGGCCCTCTACGCCCTTCG	10680
10681	TGCCTATGTACCTCACCTAGCCGACTTCAATAGCATGATTACCAAATCCCCGCA	10740
10741	TCTGGCCCACCCCCGAGGCCGAGAACCTGGCCATGCCGTGGCGGAAAGGGAGTAACG	10800
10801	CTTTAGCGCTGCCACCAAGGGAGGTGGTGTACCTGCACTTATTGAGACCAACCCAGC	10860
10861	TCTACCCCTTACCAACTACCCGAAAACAGCCCTCTGGGGGACACCCAAAGCGCAAGC	10920
10921	TCAACCTCAAGGAGGAGTTCTGAGGAAGCTGGGAGGTCTCGGCCGCCGTTCCCC	10980
10981	CCGAGGAGGCCTCGCTACATCAGCCGTGGTGAAGCCACCCCTCTACGCCGAGCGCT	11040
11041	TCGCCAAGGACCTCAAGATGGACCTCCCCGCACTCCCTCCCCAAGATCCGAACCT	11100
11101	TTGCCAGGCTGGTGAAGGCGGGTCAAGAACCTATTCACCTCCACACCGAGTACGAGACCC	11160



FIG. 7G

11161	TGCCCCCTGGAGCCCAGTCCCCCTCGGTGGAAGAGGGAGGCCCGAGGACCTACGA	11220
11221	GCGCTACCGGGTGGAGCGGATGAGGCTGGACAAGGAGAGGAGGGTTCTCAGTACAACGA	11280
11281	CTGGGTCCGGGTGGAGGGCATCCCCAGGGAGGCCTCCGCTGGCCCGGGGGGTACTC	11340
11341	CCCCTTGGAGTGGATTGGCCGCTTCTGGAAGGTGGAGGAGAAGGTGCCAAGGGCAGGGG	11400
11401	GGAGGCCATCGTCTGGGACCCCAACCTCTTCCTCAAGGAGAAGGGGAACCCCGTTACCT	11460
11461	CCTGGACCTCATGGGGCGGGCGGTCCAGGTGGCCGTGCAGACGGTTGGGATCCACGAGGA	11520
11521	GCTGAGAGAAGACGTGGAAGCTCTGCTGGGTTGAGGGGGTGCTGGCCCGCCGTTCTCCCT	11580
11581	ACTCCTTAGGGCCTACCCCTACGATCCAAGCACGGCCCTGGGGGGCGCTCAGGTGGCA	11640
11641	TCCCCACGTCCAAGGCCCCACTTGGCACCCATGCTGCGAACTTACAGCCCAAGGGCCT	11700
11701	GAAACATTCCCCCTGCTCACGGGGAAAGTTCGTAAGGAAAGAGCAAAGCCTTTTA	11760
11761	TCGCATCCGGAGAGATGGCGGGGTGGAACCTTTCCCGAGGACTCCCCATAGGGACATG	11820
11821	TAAACGGCAAGCTATCAGTGTAGACTTTTCAAAAAGAGCCATACTCGTGTTCGGT	11880
11881	TCAGAACGGCATTGGCTAAGGAGGTGGTTACAAATGGGTGTTAATGCGCTACATCCT	
11941	CCGGTAGTAGGAGCATGC	11940
	11958	